

PERFORMANCE BENCHMARKS

406.02A

Analyze, Plan, Implement, and Evaluate Response Objectives

Discipline: Hazmat – Operations Level

Effective: 3/5/2011

Revised:

Replaces:

Anne Huff, Fire Chief

I. Objective

When responding to hazardous materials/WMD incidents, operations level responders shall be able to perform the following tasks:

- A. Analyze a hazardous materials/WMD incident to determine the scope of the problem and potential outcomes by completing the following tasks:
 1. Survey a hazardous materials/WMD incident to identify the containers and materials involved, determine whether hazardous materials/WMD have been released, and evaluate the surrounding conditions.
 2. Collect hazard and response information from MSDS, and available resource materials.
 3. Predict the likely behavior of a hazardous material/WMD and its container.
 4. Estimate the potential harm at a hazardous materials/WMD incident.
- B. Plan an initial response to a hazardous materials/WMD incident within the capabilities and competencies of available personnel and personal protective equipment by completing the following tasks:
 1. Describe the response objectives for the hazardous materials/WMD incident.
 2. Describe the response options available for each objective.
 3. Determine whether the personal protective equipment provided is appropriate for implementing each option.
 4. Describe emergency decontamination procedures.
 5. Develop a plan of action, including safety considerations.
- C. Implement the planned response for a hazardous materials/WMD incident to favorably change the outcomes consistent with standard operating guidelines by completing the following tasks:
 1. Establish and enforce scene control procedures, including control zones, emergency decontamination, and communications.
 2. Where criminal or terrorist acts are suspected, establish means of evidence preservation.
 3. Initiate an incident command system (ICS) for hazardous materials/WMD incidents.
 4. Perform tasks assigned as identified in the incident action plan.
 5. Demonstrate and/or discuss aspects of emergency decontamination.
- D. Evaluate the progress of the actions taken at a hazardous materials/WMD incident to ensure that the response objectives are being met safely, effectively, and efficiently by completing the following tasks:

1. Evaluate the status of the actions taken in accomplishing the response objectives.
2. Communicate the status of the planned response.

II. Instructions – Procedures for Achieving the Objective

Given a scenario, emergency response and hazardous materials equipment to include reference sources and PPE/CPC, you will implement a planned response to favorably change the outcomes consistent with BFR's standard operating guidelines. You will also evaluate the progress of the actions taken to ensure that the response objectives are being met safely, effectively, and efficiently. You will be operating as part of a team. You will begin on my instruction to start. The skill will end when you state to me that you have completed all of the identified steps. Do you understand these instructions?

III. Examiner's Note

The responder will not be allowed to review the performance steps at the time of testing.

IV. Preparation & Equipment

- A. Hazardous materials scenario
- B. North American *Emergency Response Guidebook*, current edition
- C. MSDS
- D. Additional hazmat reference materials
- E. Personal protective equipment
- F. Chemical protective clothing
- G. Standard operating guidelines
- H. Emergency response and hazardous materials response equipment

V. Reference Sources

- A. Certification Curriculum Manual, Texas Commission on Fire Protection. (Most current edition). Austin, TX: Texas Commission on Fire Protection.
- B. Code of Federal Regulations, Title 29, Part 1910.120, Appendix A. United States. U.S. Department of Labor, Occupational Safety & Health Administration.
http://edocket.access.gpo.gov/cfr_2007/julqtr/pdf/29cfr1910.120.pdf
- C. Emergency Response Guidebook. United States. (Most current edition). Washington, DC: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.
- D. Essentials of Fire Fighting, 5th edition. International Fire Service Training Association. (2008). Stillwater, OK: Fire Protection Publications, Oklahoma State University.
- E. Firefighter's Handbook: Essentials of Firefighting and Emergency Response, 3rd edition, Delmar Publishers. (2008). Clifton Park, NY: Delmar, Cengage Learning.
- F. Fundamentals of Fire Fighter Skills, 2nd edition. International Association of Fire Chiefs, & National Fire Protection Association. (2008). Sudbury, MA: Jones and Bartlett.
- G. Hazardous Materials Awareness and Operations. DeBobes, L. J. (2009). Sudbury, MA: Jones & Bartlett.
- H. Hazardous Materials for First Responders, 3rd edition. Adams, B., & Miller, L. A. (2004). Stillwater, OK: Fire Protection Publications, Oklahoma State University.
- I. Hazardous Materials Handbook: Awareness and Operations Levels. Hawley, C & Walter, A. (2008). Clifton Park, NY: Delmar, Cengage Learning.

- J. Hazardous Materials/Weapons of Mass Destruction Response Handbook, 5th edition, Trebisacci, D. G. (2008). Quincy, MA: National Fire Protection Association.
- K. NFPA 472: Standard for Professional Competence of Responders to Hazardous Materials Incidents. (2008). Quincy, MA: NFPA Publications. National Fire Protection Association.
- L. NIOSH Pocket Guide to Chemical Hazards. Cincinnati National Institute for Occupational Safety and Health. (2005 or most current edition). OH: US Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.
<http://www.cdc.gov/niosh/npg/>.
- M. Standards Manual for Fire Protection Personnel. Texas Commission on Fire Protection. (Most current edition). Austin, TX: Texas Commission on Fire Protection.

Note: *The most current edition of the following publications and media are recommended (not required) supplemental material for program use.*

Texts

- A. DOT Chart 13: Hazardous Materials Marking, Labeling and Placarding Guide. United States. (2007). Washington, DC: U.S. Dept. of Transportation, Pipeline and Hazardous Materials Safety Administration.
- B. Hazardous Materials Field Guide, 2nd edition. Bevelacqua, A. S. & Stilp, R. H. (2007). Albany, NY: Delmar Publications.
- C. Symbol Seeker: Hazard Identification Manual, Burns, P. P. (2002). Preston, England: Symbol Seeker.

Media

- A. Emergency Response Guidebook 2008. United States. (2008). [DVD]. Washington, DC: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.
- B. Hazardous Materials Awareness and Operations. International Association of Fire Chiefs, & National Fire Protection Association. (2006). [DVD Set]. Sudbury, MA: Jones and Bartlett.
- C. Hazmat Decontamination. Action Training Systems, Inc. (2008). [4 Disc DVD Set]. Poulsbo, WA: Action Training Systems.
- D. Hazmat Operations. Detrick Lawrence Corporation, Pye, S., & Lamont, J. B. (2006). [8 Disk DVD Set]. Edgartown, MA: Emergency Film Group.

406.02A - Analyze, Plan, Implement, and Evaluate Response Objectives
Discipline: Hazardous Materials-Operations Level

Name:	Officer #:
Evaluator:	Officer #:
Date:	Location:

The Operations Level Responder shall: *(No partial points given)*

- A. Analyze a hazardous materials/WMD incident to determine the scope of the problem and potential outcomes by completing the following tasks:
1. Survey a hazardous materials/WMD incident to identify the containers and materials involved, determine whether hazardous materials/WMD have been released, and evaluate the surrounding conditions **P/F** _____
 2. Collect hazard and response information from MSDS; other available resource materials; and shipper/manufacturer contacts and available resources **P/F** _____
 3. Predict the likely behavior of a hazardous material/WMD and its container **P/F** _____
 4. Estimate the potential harm at a hazardous materials/WMD incident **P/F** _____
- B. Plan an initial response to a hazardous materials/WMD incident within the capabilities and competencies of available personnel and personal protective equipment by completing the following tasks:
1. Describe the response objectives for the hazardous materials/WMD Incident..... **P/F** _____
 2. Describe the response options available for each objective **P/F** _____
 3. Determine whether the personal protective equipment provided is appropriate for implementing each option **P/F** _____
 4. Describe emergency decontamination procedures **P/F** _____
 5. Develop a plan of action, including safety considerations **P/F** _____
- C. Implement the planned response for a hazardous materials/WMD incident to favorably change the outcomes consistent with the emergency response plan and/or standard operation procedures by completing the following tasks:
1. Establish and enforce scene control procedures, including control zones, emergency decontamination, and communications **P/F** _____
 2. Where criminal or terrorist acts are suspected, establish means of evidence preservation **P/F** _____
 3. Initiate an incident command system (ICS) for hazardous materials/WMD incidents **P/F** _____
 4. Perform tasks assigned as identified in the incident action plan **P/F** _____
 5. Demonstrate and/or discuss emergency decontamination **P/F** _____

- D. Evaluate the progress of the actions taken at a hazardous materials/WMD incident to ensure that the response objectives are being met safely, effectively, and efficiently by completing the following tasks:
1. Evaluate the status of the actions taken in accomplishing the response objectives **P/F** _____
 2. Communicate the status of the planned response **P/F** _____

Note: Attach this page to the first.

Points Possible	Passing Score	Attempt	Performance Rating (Points)	PASS	FAIL
P/F	P/F	First			
		Second			
		Third			